What Is Claimed Is:

1. A separation system for separating floating and non-floating particulate from a fluid, the system comprising:

a) a tank having a bottom and interior sidewalls to define a storage chamber, an inlet at a first location on the interior sidewalls for receiving the fluid, and an outlet at a second location on the interior sidewalls for transferring the fluid out of the tank;

b) a baffle having a bottom, a first side baffle wall, a second side baffle wall and a port through from the first side baffle wall to the second side baffle wall, the baffle connected to the interior sidewalls of the tank, the bottom of the baffle spaced above the bottom of the tank to establish a storage chamber outlet for fluid within the storage chamber to pass along the second side baffle wall to the outlet;

c) a bypass including an inlet flow control means on the second side baffle wall between the inlet and the port of the baffle and an outlet flow control means on the second side baffle wall between the storage chamber outlet and the outlet; and

d) a weir positioned between the inlet flow control means and the outlet flow control means, the weir configured to divert fluid from the inlet to the baffle port under relatively low fluid flows and to divert one portion of the fluid from the inlet to the baffle port and to allow the remaining portion of the fluid to flow from the inlet to the outlet under relatively high fluid flows.

2. The system as claimed in Claim 1 wherein the bypass includes a bypass plate attached between the second side baffle wall and the interior sidewalls of the tank.

3. The system as claimed in Claim 2 wherein the inlet flow control means is the space defined by the region between the inlet, the second side baffle wall, the interior sidewalls of the tank, the bypass plate and the weir.

4. The system as claimed in Claim 2 wherein the outlet flow control means is the space defined by the region between the outlet, the second side baffle wall, the interior walls of the tank, the bypass plate and the weir.

5. The system as claimed in Claim 4 wherein the bypass plate in the outlet flow control means space includes one or more ports.

6. The system as claimed in Claim 2 wherein the bypass plate is in a declined orientation from the inlet of the tank to the outlet of the tank.

7. The system as claimed in Claim 1 wherein the weir is a curved plate.

8. The system as claimed in Claim 1 wherein the weir is a flat plate angled from the inlet of the tank toward the baffle port.

9. The system as claimed in Claim 1 wherein the interior sidewalls of the tank are corrugated.

10. The system as claimed in Claim 1 wherein the baffle is curved.

11. The system as claimed in Claim 10 wherein the baffle has a complex curvature including a first curvature aspect and a second curvature aspect, wherein the first curvature aspect includes the baffle port and terminates at an interface with the weir, and the second curvature aspect terminates at an interface with the interior sidewalls of the tank.

12. The system as claimed in Claim 11 wherein the weir has a curved configuration substantially matching a curvature of the second curvature aspect.

13. The system as claimed in Claim 12 wherein the weir and the second curvature aspect are formed together as a unitary structure.

14. The system as claimed in Claim 1 wherein the bottom of the baffle is shaped to substantially follow the shape of the particulates trajectory within the storage chamber.

15. The system as claimed in Claim 1 wherein the opening defined by the baffle port is shaped such that it is spaced away from the bypass plate near the inlet and approaches the bypass plate toward an interface of the baffle and the weir.

16. The system as claimed in Claim 1 wherein the weir has a wall height such that its top exceeds the height of the top of the baffle port.

17. The system as claimed in Claim 1 wherein the outlet flow control means includes a bypass plate and a secondary flow control wall with an outlet port therein, the outlet port configured to transfer fluid from the storage chamber to the tank outlet.

18. The system as claimed in Claim 17 wherein the secondary flow control wall is vertically oriented with respect to the tank bottom.

19. The system as claimed in Claim 17 wherein the inlet flow control means includes a weir cover plate attached to the weir and to the secondary flow control wall.

20. The system as claimed in Claim 17 wherein the bypass plate includes an upstream section and a downstream section divided from the upstream section by the secondary flow control wall, the upstream section including an aperture.

21. A separation system for separating floating and non-floating particulate from a fluid, the system comprising:

a) a tank having a tank bottom and a storage chamber bottom spaced above the tank bottom and interior sidewalls, the interior side walls and the storage chamber bottom defining a storage chamber, an inlet at a first location on the interior sidewalls for receiving the fluid from an upstream conduit, and an outlet at a second location on the interior sidewalls for transferring the fluid to a downstream conduit;

b) a baffle having a bottom attached to the storage chamber bottom, a first side baffle wall, a second side baffle wall and a port through from the first side baffle wall to the second side baffle wall, the baffle connected to the interior sidewalls of the tank;

c) a standpipe substantially centered within the storage chamber and establishing a passageway between the storage chamber and the outlet chamber, the outlet chamber for receiving fluid from the storage chamber and in communication with a region between the second side baffle wall and a portion of the interior sidewalls of the tank;

d) a bypass including an inlet flow control means on the second side baffle wall between the inlet and the port of the baffle and an outlet flow control means on the second side baffle wall between the outlet chamber and the outlet; and

e) a weir positioned between the inlet flow control means and the outlet flow control means, the weir configured to divert fluid from the inlet to the baffle port under relatively low fluid flows and to divert one portion of the fluid from the inlet to the baffle port and to allow the remaining portion of the fluid from the inlet to the outlet under relatively high fluid flows.

22. The system as claimed in Claim 21 wherein the bypass includes a bypass plate attached between the second side baffle wall and the interior sidewalls of the tank.

23. The system as claimed in Claim 22 wherein the inlet flow control means is the space defined by the region between the inlet, the second side baffle wall, the interior sidewalls of the tank, the bypass plate and the weir.

24. The system as claimed in Claim 22 wherein the outlet flow control means is the space defined by the region between the outlet, the second side baffle wall, the interior walls of the tank, the bypass plate and the weir.

25. The system as claimed in Claim 24 wherein the bypass plate in the outlet flow control means space includes one or more ports.

26. The system as claimed in Claim 22 wherein the bypass plate is in a declined orientation from the inlet of the tank to the outlet of the tank.

27. The system as claimed in Claim 21 wherein the weir is a curved plate.

28. The system as claimed in Claim 21 wherein the weir is a flat plate angled from the inlet of the tank toward the baffle port.

29. The system as claimed in Claim 21 wherein the interior sidewalls of the tank are corrugated.

30. The system as claimed in Claim 21 wherein the standpipe includes a bellmouth port and a crucifix therein.

31. The system as claimed in Claim 21 wherein the standpipe includes a bellmouth port and a standpipe cover spaced above and attached to the bellmouth port.